

CLAIMS

What is claimed is:

1. An electronic device comprising:
an integrated circuit semiconductor die having at least one bond pad thereon;
a conductive plastic lead frame having a plurality of lead fingers, said conductive plastic lead frame formed by one of compression molding and injection molding;
an adhesive attaching a portion of said integrated circuit semiconductor die to a portion of said conductive plastic lead frame;
at least one connector connecting said at least one bond pad of said integrated circuit semiconductor die to said at least one lead finger of the plurality of lead fingers of said conductive plastic lead frame; and
encapsulating material for encapsulating at least a portion of said integrated circuit semiconductor and for encapsulating at least a portion of at least one lead of said conductive plastic lead frame.

2. An electronic device comprising:
an integrated circuit semiconductor die having at least one bond pad thereon;
a conductive plastic lead frame having a plurality of lead fingers, said conductive plastic lead frame formed by one of stamping and etching;
an adhesive for attaching a portion of said integrated circuit semiconductor die to a portion of said conductive lead frame;
at least one connector connecting said at least one bond pad of said integrated circuit semiconductor die to at least one lead finger of the plurality of lead fingers of said conductive plastic lead frame; and
encapsulating material for encapsulating a portion of said integrated circuit semiconductor die and for encapsulating a portion said at least one lead finger of said conductive plastic lead frame.

3. An electronic device comprising:
an integrated circuit semiconductor die having at least one bond pad thereon;

a conductive plastic lead frame having a plurality of lead fingers, said conductive plastic lead frame including a plastic lead frame structure having a conductive polymeric material located on at least a portion of the plurality of lead fingers;
an adhesive for attaching a portion of said integrated circuit semiconductor die to a portion of said conductive plastic lead frame;
at least one connector connecting said at least one bond pad of said integrated circuit semiconductor die to said at least one lead finger of said conductive plastic lead frame;
and
encapsulating material for encapsulating at least a portion of said integrated circuit semiconductor die and for encapsulating at least a portion of said at least one lead of said conductive plastic lead frame.

4. A circuit card comprising:
at least one electronic device;
a circuit card; and
at least one connector attaching said at least one electronic device to a portion of said circuit card, said at least one electronic device comprising an integrated circuit semiconductor die having at least one bond pad thereon and attached to at least a portion of a plastic lead frame, said plastic lead frame including an intrinsic conductive polymer.

5. The circuit card of claim 4, wherein said plastic lead frame comprises a plastic lead frame structure coated with an intrinsic conductive polymer.

6. The circuit card of claim 5, wherein said intrinsic conductive polymer coating is selected from the group consisting of polyaniline.

7. The circuit card of claim 6, wherein said intrinsic conductive polymer coating includes a polyaniline coating having a thickness in the range of between about 25 μm and about 75 μm .

8. The circuit card of claim 4, wherein said plastic lead frame comprises a composite plastic formed of a conventional polymer intermixed with an intrinsic conductive polymer.

9. A computer system including at least one circuit card, said at least one circuit card comprising at least one electronic device, said at least one electronic device including an integrated circuit semiconductor die having at least one bond pad thereon and attached to at least a portion of a plastic lead frame including an intrinsic conductive polymer material.

10. The computer system of claim 9, wherein said plastic lead frame comprises a plastic lead frame structure coated with an intrinsic conductive polymeric material.

11. The circuit card of claim 9, wherein said intrinsic conductive polymer material comprises a material selected from the group consisting of polyaniline.

12. The circuit card of claim 9, wherein said plastic lead frame includes a composite plastic having a conventional polymer intermixed with a conductive polymer.